

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the
Identification of Dechlorinating Bacteria
Inventor: Ebersole et al.

1/20

The *Dehalococcoides* sp. alignment

DHE seq alignments1.msf MSF: 1223

Name: DHE.(cornell)
Name: DHE.(stf).seq
Name: DHE.(pl).seq
Name: DHE.(dll).seq
Name: DHE.(dab).seq
Name: DHE.(pin).seq

//
//

1	60
DHE.(cornell)	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
DHE.(stf).seq	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
DHE.(pl).seq	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
DHE.(dll).seq	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
DHE.(dab).seq	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
DHE.(pin).seq	GATGAACGCTAGCGCGTGCCCTTATGCAAGTCGAACGGTCTTAAGCAATTAAAGATA
61	120
DHE.(cornell)	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA
DHE.(stf).seq	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA
DHE.(pl).seq	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA
DHE.(dll).seq	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA
DHE.(dab).seq	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA
DHE.(pin).seq	GTGGCAACGGGTGAGTAACGGCGTAAGTAACCTACCTCTAAGTGGGGGATAGCTTCGGGA

FIG. 1A

APPROVED	O.G. FIG.	
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2/20

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121 DHE. (cornell) AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGCAAGG
180 AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGTAAGG
DHE (stf) .seq AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGTAAGG
DHE. (pl) .seq AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGCAAGG
DHE. (dll) .seq AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGTAAGG
DHE. (dab) .seq AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGTAAGG
DHE. (pin) .seq AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTAAAGCCGTAAGG

181 DHE. (cornell) TGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAATGGTCTACCAAGGCT
240 TGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAACGGCCCTACCAAGGCT
DHE (stf) .seq TGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCT
DHE. (pl) .seq TGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCT
DHE. (dll) .seq TGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAACGGCCCTACCAAGGCT
DHE. (dab) .seq CGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCT
DHE. (pin) .seq CGCTTGGTGAGGGGCTTGCGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCT

241 DHE. (cornell) TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
300 TCGATCGGTAGCTTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
DHE (stf) .seq TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
DHE. (pl) .seq TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
DHE. (dll) .seq TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
DHE. (dab) .seq TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
DHE. (pin) .seq TCGATCGGTAGCT.GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG
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FIG. 1B

APPROVED	O.G. FIG.	
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3/20

301 DHE. (cornell) ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE (stf).seq ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (pl).seq ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (dl1).seq ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (dab).seq ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (pin).seq ACTCCTACGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA

361 DHE. (cornell) CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCACAGGGAAGAAATAATG
 DHE (stf).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCACAGGGAAGAAATAATG
 DHE. (pl).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCACAGGGAAGAAATAATG
 DHE. (dl1).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCACAGGGAAGAAATAATG
 DHE. (dab).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCATAGGGAAGAAATAATG
 DHE. (pin).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTGTAAACCTCTTTTCATAGGGAAGAAATAATG

421 DHE. (cornell) ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG
 DHE (stf).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG
 DHE. (pl).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG
 DHE. (dl1).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG
 DHE. (dab).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG
 DHE. (pin).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGG

FIG. 1C

APPROVED	O.G. FIG.	
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4/20

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481
DHE. (cornell) 540
DHE. (stf) .seq
DHE. (pl) .seq
DHE. (dll) .seq
DHE. (dab) .seq
DHE. (pin) .seq

DHE. (cornell) 600
DHE. (stf) .seq
DHE. (pl) .seq
DHE. (dll) .seq
DHE. (dab) .seq
DHE. (pin) .seq

DHE. (cornell) 660
DHE. (stf) .seq
DHE. (pl) .seq
DHE. (dll) .seq
DHE. (dab) .seq
DHE. (pin) .seq

GAAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG
.AAGCAAGCGTTATCCGGATTATTGGCGGTAAAGTGAGCGTAGGTGCTCTTCAAGTTG

GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA
GATGTGAAATTTCCCGCTTAACCGGACGTGTCATTCAATACTGTTGGACTAGAGTACA

GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
GCAGGAGAAAACGGAATTCCTCGGTGTAGTGTTAAATGCGTAGATATCGGGAGGAACACC
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FIG. 1D

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5/20

661 720
DHE. (cornell) AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG
DHE (stf).seq AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG
DHE. (pl).seq AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG
DHE. (dll).seq AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG
DHE. (dab).seq AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG
DHE. (pin).seq AGAGGCGAAGCGGTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGGGAGCG

721 780
DHE. (cornell) AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT
DHE (stf).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT
DHE. (pl).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT
DHE. (dll).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT
DHE. (dab).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT
DHE. (pin).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAACTATGGACACTAGGTATAGGGAGT

781 840
DHE. (cornell) ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC
DHE (stf).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC
DHE. (pl).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC
DHE. (dll).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC
DHE. (dab).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC
DHE. (pin).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGAGTACGGTCGC

FIG. 1E

6/20

841	DHE. (cornell)	900	AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCAGCGGAGCGTGTGGTTTAA
	DHE (stf) .seq		AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (pl) .seq		AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCCTTACAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (dll) .seq		AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (dab) .seq		AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (pin) .seq		AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCAGCGGAGCGTGTGGTTTAA
901	DHE. (cornell)	960	TTCGATGCTACACGAAGAAC.TTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
	DHE (stf) .seq		TTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
	DHE. (pl) .seq		TTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
	DHE. (dll) .seq		TTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
	DHE. (dab) .seq		TTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
	DHE. (pin) .seq		TTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAACCGAAAG
961	DHE. (cornell)	1020	GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG
	DHE (stf) .seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG
	DHE. (pl) .seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG
	DHE. (dll) .seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG
	DHE. (dab) .seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG
	DHE. (pin) .seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGCTCAGCTCGTG

FIG. 1F

7/20

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1080
DHE. (cornell) CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACC.TTGTGCTAGTTAAATTTTC
DHE (stf) .seq CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACCCTTGTGCTAGTTAAATTTTC
DHE. (pl) .seq CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACCCTTGTGCTAGTTAAATTTTC
DHE. (dll) .seq CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACCCTTGTGCTAGTTAAATTTTC
DHE. (dab) .seq CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACCCTTGTGCTAGTTAAATTTTC
DHE. (pin) .seq CCGTGAGGTGTTGGTTAAGTCCTGCAACGAGCGCAACCCTTGTGCTAGTTAAATTTTC

1140
DHE. (cornell) TAGCGAGACTAGCGAGACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC
DHE (stf) .seq TAGCGAG.....ACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC
DHE. (pl) .seq TAGCGAG.....ACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC
DHE. (dll) .seq TAGCGAG.....ACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC
DHE. (dab) .seq TAGCGAG.....ACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC
DHE. (pin) .seq TAGCGAG.....ACTGCCCCCGGAACGGGAGGAAGGTGGGGATGACGTCAAGTC

1200
DHE. (cornell) AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
DHE (stf) .seq AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
DHE. (pl) .seq AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
DHE. (dll) .seq AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
DHE. (dab) .seq AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
DHE. (pin) .seq AGCATGGCCCTTTATATCTTGGGCTACACACGCTACAATGGACAGAACAAATAGGTTGCA
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FIG. 1G

APPROVED	O.G. FIG.	
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8/20

<p>1260</p> <p>DHE. (cornell) ACAGTGTGAACTGGAGCTAATCCCCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p> <p>DHE (stf) .seq ACAGTGTGAACTGGAGCTAATCCTCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p> <p>DHE. (pl) .seq ACAGTGTGAACTGGAGCTAATCCCCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p> <p>DHE. (dll) .seq ACAGTGTGAACTGGAGCTAATCCTCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p> <p>DHE. (dab) .seq ACAGTGTGAACTGGAGCTAATCCCCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p> <p>DHE. (pin) .seq ACAGTGTGAACTGGAGCTAATCCCCAAAGCTGTCCCTCAGTTCGGATTGCAGGCTGAAACC</p>	<p>1261</p> <p>DHE. (cornell) CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p> <p>DHE (stf) .seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p> <p>DHE. (pl) .seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p> <p>DHE. (dll) .seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p> <p>DHE. (dab) .seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p> <p>DHE. (pin) .seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT</p>	<p>1380</p> <p>DHE. (cornell) CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p> <p>DHE (stf) .seq CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p> <p>DHE. (pl) .seq CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p> <p>DHE. (dll) .seq CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p> <p>DHE. (dab) .seq CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p> <p>DHE. (pin) .seq CTCGGGGCCTTGTACACACCGCCCGTCACGTGATGAGCCGGTAACACTTGAAGTCGATG</p>
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FIG. 1H

APPROVED	O.G. FIG.	
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9/20

1381
DHE. (cornell) TGCCAACCGCAAGGAGGCAGTCGCCGAGGGTGGGACTGGTAATTGGGACGGAAGTCGTAAC
DHE (stf).seq TGCCCAACC
DHE. (pl).seq TGCCCAACC
DHE. (dll).seq TGCCCAACC
DHE. (dab).seq TGCCCAACC
DHE. (pin).seq TGCCCAACC

1441 1446
DHE. (cornell) AAGGTA (SEQ ID NO:7)
DHE (stf).seq (SEQ ID NO:3)
DHE. (pl).seq (SEQ ID NO:2)
DHE. (dll).seq (SEQ ID NO:6)
DHE. (dab).seq (SEQ ID NO:4)
DHE. (pin).seq (SEQ ID NO:5)

FIG. 11

10/20

The *Dehalococcoides* sp. alignment with *E. coli*

Name: E.coli.16S
Name: DHE.(cornell)
Name: DHE (Stf).seq
Name: DHE.(pl).seq
Name: DHE.(dab).seq
Name: DHE.(pin).seq
Name: DHE.(dll).seq
//

E.coli.16S seq	1	60
DHE.(cornell)	AAATTGAAGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGAGCCCTAACACATGCAA	
DHE.(Stf).seqGATGAACGCTAGCGCGTGCCCTTATGCAATGCAA	
DHE.(pl).seqGATGAACGCTAGCGCGTGCCCTTATGCAATGCAA	
DHE.(dab).seqGATGAACGCTAGCGCGTGCCCTTATGCAATGCAA	
DHE.(pin).seqGATGAACGCTAGCGCGTGCCCTTATGCAATGCAA	
DHE.(dll).seqGATGAACGCTAGCGCGTGCCCTTATGCAATGCAA	
E.coli.16S seq	61	120
DHE.(cornell)	GTCGAACGGTAACAGGAAGAGCTTGCTTCTTTGCTGACGAGTGGCGGACGGGTGAGTAA	
DHE.(Stf).seq	GTCGAACGGTCTTAAGCAA...TTAA.....GAT.AGTGGCAAACGGGTGAGTAA	
DHE.(pl).seq	GTCGAACGGTCTTAAGCAA...TTAA.....GAT.AGTGGCAAACGGGTGAGTAA	
DHE.(dab).seq	GTCGAACGGTCTTAAGCAA...TTAA.....GAT.AGTGGCAAACGGGTGAGTAA	
DHE.(pin).seq	GTCGAACGGTCTTAAGCAA...TTAA.....GAT.AGTGGCAAACGGGTGAGTAA	
DHE.(dll).seq	GTCGAACGGTCTTAAGCAA...TTAA.....GAT.AGTGGCAAACGGGTGAGTAA	

FIG. 2A

APPROVED	O.G. FIG.	
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11/20

121
E.coli.16S seq
DHE. (cornell)
DHE. (Stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
179
TGCTCTGGGAAAC.TGCCTGATGGAGGGGATAACTACTGGAAACGGTAGCTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
CGCGTAAGTAACCTACCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATACCGCA
180
E.coli.16S seq
DHE. (cornell)
DHE. (Stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
236
TAACGTCGCAAGACCAAGAGGGGACCTTCGGGCCCTCTTGCCATCGGATGTG...CCCA
TGTGATGGGCTGAC.ATAAGTCGGTTCAATAAGCCGCAAGGTGCTTGGTGAGGGGCTTG
TGTGGTGGGCCGAC.ATAAGTTGGTTCACTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG
TGTGATGGGCTGAC.ATAAGTCGGTTCACTAAAGCCGCAAGGTGCTTGGTGAGGGGCTTG
TGTGGTGGGCCGAC.ATAAGTTGGTTCACTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG
TGTGGTGGGCCGAC.ATAAGTTGGTTCACTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG
TGTGGTGGGCCGAC.ATAAGTTGGTTCACTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG
TGTGGTGGGCCGAC.ATAAGTTGGTTCACTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG
237
E.coli.16S seq
DHE. (cornell)
DHE. (Stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
295
GATGGGATTAGCTAGTAGTGGGGTAACGGCTACCTAGCGACGATCCCTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAATGGTCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAACGGCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAATGGCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAATGGCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAATGGCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAATGGCTACCAAGGCTTCGATCGGTAGCT.GGTC
CGTCCGATTAGCTAGTTGGTGGGGTAACGGCTACCAAGGCTTCGATCGGTAGCT.GGTC

FIG. 2B

12/20

355
296
E.coli.16S seq
DHE.(cornell)
DHE.(stf).seq
DHE.(pl).seq
DHE.(dab).seq
DHE.(pin).seq
DHE.(dll).seq
TGAGAGGATGACGACCACTGGAACCTGAGACACGGTCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
415
356
E.coli.16S seq
DHE.(cornell)
DHE.(stf).seq
DHE.(pl).seq
DHE.(dab).seq
DHE.(pin).seq
DHE.(dll).seq
AGTGGGAAATATTGCACAAATGGGCGCAAGCCTGATGCAGCCATGCCCGCGTGTATGAAGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCCGCGTGAGGGATGAA
475
416
E.coli.16S seq
DHE.(cornell)
DHE.(stf).seq
DHE.(pl).seq
DHE.(dab).seq
DHE.(pin).seq
DHE.(dll).seq
GGCCTTCGGGTTGTAAAGTACTTTACGCGGGAGGAAGGAGTAAAGTTAATACCTTTGCG
GGCTTTCGGGTTGTAAACCTCTTTTTCACAGGGAAGAA...TAAT...
GGCTCTCGGGTTGTAAACCTCTTTTTCACAGGGAAGAA...TAAT...
GGCTTTCGGGTTGTAAACCTCTTTTTCACAGGGAAGAA...TAAT...
GGCTTTCGGGTTGTAAACCTCTTTTTCATAGGGAAGAA...TAAT...
GGCTTTCGGGTTGTAAACCTCTTTTTCATAGGGAAGAA...TAAT...
GGCTTTCGGGTTGTAAACCTCTTTTTCATAGGGAAGAA...TAAT...
GGCTCTCGGGTTGTAAACCTCTTTTTCACAGGGAAGAA...TAAT...

FIG. 2C

14/20

```
655      714
E.coli.16S seq      AGTCTCGTAGAGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGG
DHE. (cornell)      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG
DHE. (stf) .seq      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG
DHE. (pl) .seq      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG
DHE. (dab) .seq      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG
DHE. (pin) .seq      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG
DHE. (dll) .seq      AGTACAGCAGGAGAAACCGAATTCCCGGTGTAGTGTAATAATGCGTAGATATCGGAGG

715      774
E.coli.16S seq      AATACCGTGGCGAAGGCGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGG
DHE. (cornell)      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (stf) .seq      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (pl) .seq      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (dab) .seq      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (pin) .seq      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (dll) .seq      AACACCAGAGGCGAAGGCGGTTTCTAGTTGTCACTGACACTGAGGCTCGAAAGCGTGG

755      834
E.coli.16S seq      GGAGCAACACAGGATTAGATACCCCTGGTAGTCCACGCCGTAAACGATGTCGACTTGGAGGT
DHE. (cornell)      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (stf) .seq      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (pl) .seq      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (dab) .seq      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (pin) .seq      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (dll) .seq      GGAGCGAACACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
```

FIG. 2E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the Identification
of Dechlorinating Bacteria
Inventor: Ebersole et al.

15/20

835	E. coli. 16S seq	893	TGTGCCCTTGAGGCGTGGCTT.CCGGAGCTAACGCGTTAAGTCGACCGCCTGGGGAGTAC
	DHE. (cornell)		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
	DHE. (stf) .seq		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
	DHE. (pl) .seq		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
	DHE. (dab) .seq		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
	DHE. (pin) .seq		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
	DHE. (dll) .seq		GGAGTATCGACCCCTCTCTGTGTCGGAAGCTAACGCTTAAAGTGTCGCCCTGGGGAGTAC
901	E. coli. 16S seq	953	GGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCGCCGACAAAGCGGTGGAGCATGTG
	DHE. (cornell)		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
	DHE. (stf) .seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
	DHE. (pl) .seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
	DHE. (dab) .seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
	DHE. (pin) .seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
	DHE. (dll) .seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCGCCGACAAAGCAGCGAGCGTGTG
954	E. coli. 16S seq	1011	GTTTAATTCGATGCAACGCCGAAGAACCTTACCTGGTCTTGACATCCACGGA..AGTTTTC
	DHE. (stf) .seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAC
	DHE. (pl) .seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAC
	DHE. (dab) .seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAC
	DHE. (pin) .seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAC
	DHE. (dll) .seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCATGAAGTAGTGAAC

FIG. 2F

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the
Identification of Dechlorinating Bacteria
Inventor: Ebersole et al.

16/20

1012
1068
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
AGAGATGAGAAATGTGCCTTCGGG..AACCGTGAG.ACAGGTGCTGCATGGCTGTCGTCAG
CGAAAGGGAAACGACCTGTAAAGTCAGGAGTTTGACACAGGTGCTGCATGGCTGTCGTCAG
CGAAAGGGAAACGACCTGTAAAGTCAGGAGTTTGACACAGGTGCTGCATGGCTGTCGTCAG
CGAAAGGGAAACGACCTGTAAAGTCAGGAGTTTGACACAGGTGCTGCATGGCTGTCGTCAG
TGAAAGGGAAACGACCTGTAAAGTCAGGAACTTGACACAGGTGCTGCATGGCTGTCGTCAG
TGAAAGGGAAACGACCTGTAAAGTCAGGAACTTGACACAGGTGCTGCATGGCTGTCGTCAG
CGAAAGGGAAACGACCTGTAAAGTCAGGAGTTTGACACAGGTGCTGCATGGCTGTCGTCAG

1069
1128
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
CTCGTGTGTGAAATGTGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTTGC
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACC.TTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.
CTCGTGCCGTGAGGTGTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.

1129
1187
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
CAGCGTCCGGCGGAACCTCAAAGGAGACTGCCAGTGATAAACTGG.AGGAAGGTGGGG
.AATTTCTAGC.GAG.ACT..AGCGAGACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG
.AATTTCTAGC.GAG.....ACTGCC.CGCGAAACGGGAGGAAAGGTGGGG

FIG. 2G

17/20

```
1188      1247
E.coli.16S seq      ATGACGTCAAGTCATCATGGCCCTTACGACCAGGGCTACACAGTGTGCTACAAATGGCGCAT
DHE. (cornell)      ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA
DHE. (Stf) .seq      ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA
DHE. (pl) .seq       ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA
DHE. (dab) .seq      ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA
DHE. (pin) .seq      ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA
DHE. (dll) .seq      ATGACGTCAAGTCAGCATGGCCCTTTATATCTTTGGGCTACACACGCTACAAATGGACAGA

1248      1307
E.coli.16S seq      ACAAGAGAAAGCGACCTCGGAGAGCAAGCGGACCTCATAAAGTGCGTCGTAGTCCGGAT
DHE. (cornell)      ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCC.CAAAGCTGTCTCAGTTCGGAT
DHE. (Stf) .seq      ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCT.CAAAGCTGTCTCAGTTCGGAT
DHE. (pl) .seq       ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCC.CAAAGCTGTCTCAGTTCGGAT
DHE. (dab) .seq      ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCC.CAAAGCTGTCTCAGTTCGGAT
DHE. (pin) .seq      ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCC.CAAAGCTGTCTCAGTTCGGAT
DHE. (dll) .seq      ACAATAGGTTGCAACAGTGTGAACTGGAGCTAATCCT.CAAAGCTGTCTCAGTTCGGAT

1308      1367
E.coli.16S seq      TGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGTGGATCAGAAATGCC
DHE. (cornell)      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (Stf) .seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (pl) .seq       TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (dab) .seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (pin) .seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (dll) .seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
```

FIG. 2H

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the
Identification of Dechlorinating Bacteria
Inventor: Ebersole et al.

18/20

1368	1437
E.coli.16S seq	ACGGTGAATACGTTCCGGGCCCTTGTAACACCGCCCGTCACACCATGGAGTGGGTTGC
DHE.(cornell)	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGANAGCCGGTAAC
DHE.(stf).seq	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGAAAGCCGGTAAC
DHE.(pl).seq	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGAAAGCCGGTAAC
DHE.(dab).seq	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGAAAGCCGGTAAC
DHE.(pin).seq	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGAAAGCCGGTAAC
DHE.(dll).seq	GCGGTGAATACGTTCTCGGGCCCTTGTAACACCGCCCGTCACCATGAAAGCCGGTAAC
1438	1487
E.coli.16S seq	AAAAGAAGTAGGTAGCTTAACCTTCGGAGGGCGCTTACCACCTTGTGATTCATGACTGG
DHE.(cornell)	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
DHE.(stf).seq	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
DHE.(pl).seq	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
DHE.(dab).seq	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
DHE.(pin).seq	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
DHE.(dll).seq	ACTTGAAGTCGATGTGCCAACCGCAAGAGGAGCAGTCGCCGAGGTGGGACTGGTAATTGG
1488	1542
E.coli.16S seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(cornell)	GACGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(stf).seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(pl).seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(dab).seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(pin).seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA
DHE.(dll).seq	GGTGAAGTCGTAAACAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTTA

FIG. 21

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

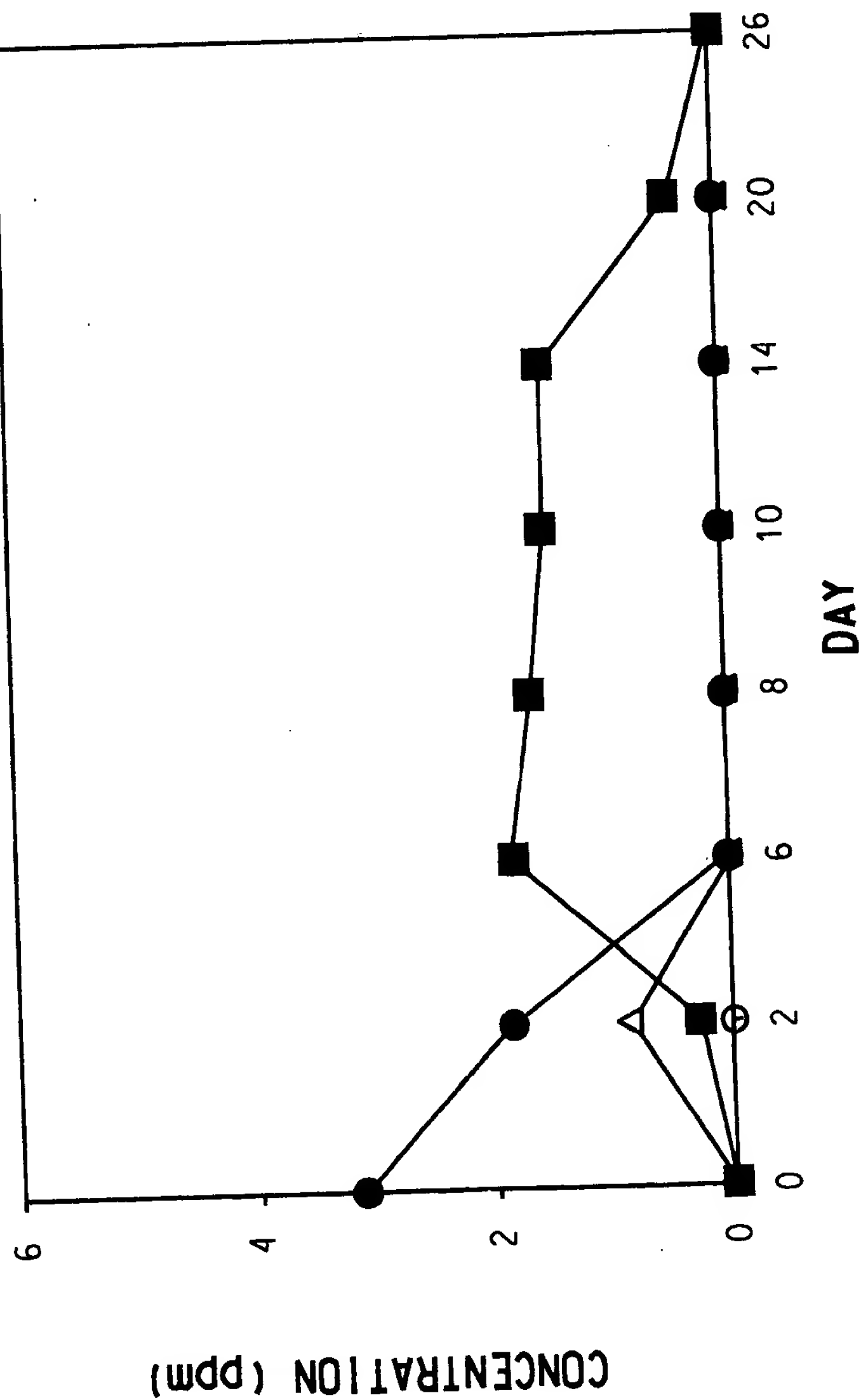
Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the Identification
 of Dechlorinating Bacteria
 Inventor: Ebersole et al.

19/20

PCE
 TCE
 DCE
 VC

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 —■—
 —○—

FIG. 3



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the
 Identification of Dechlorinating Bacteria
 Inventor: Ebersole et al.

20/20

FIG. 4

